ABSTRACT

Disclosed is a system providing a VPN service by connecting a VPN (Virtual Private Network) to a mobile communication network. A home agent 5 (HA) stores location information of a mobile node (MN) and information on whether the MN is registered in the VPN. A foreign agent (FA) transmits a location registration request message to the HA by receiving location registration information of the MN, and transmits data to an ISP (Internet Service Provider) router in the same subnet upon receiving a VPN service request. A server 10 provides the VPN service and a router network connects the VPN to the FA. The router network includes a server for searching an edge IP router in the network using an address of the FA. The HA prevents an MN from accepting a call request received from a specific node in an IP network while the MN is performing a VPN service.